



Tractor Div	183	Liberty engine (Coffin)	10	H
Transport Committees at work in every state	291	(Vincent)	12	
War Committee of Technical Societies	382	(Stratton)	13	HAAS, HERBERT, ON THE DIESEL ENGINE
		(Kettering)	14	299
		Exhibition	15	Hale, W A
		Performance	278, 373, 376	184
<b>Conferences</b>		Designs	232	Hanks, M W
Headlamp tests in Albany	182	De la Vergne engine	173	238
International aircraft conference, London	4, 87	Diesel engines	4	Headlamp glare
Producers and refiners of oil	317	Diesel engine design (W G G Godron)	174	332
Section conference in Dayton	121	Diesel engine (Herbert Haas)	299	Headlamp tests in N Y State
Constitution, amendments to	2, 289	Exhaust headers and mufflers for airplane engines (Archibald Black)	142	182
		Gas Engine War Service Committee	377	Hvid engine, possibilities of (E B Blakely)
		Hispano-Suiza (D McL Lay)	367	166
<b>Conventions</b>		Hvid engine, possibilities of (E B Blakely)	166	I
National Tractor Demonstration, Salina, July	197	Modern aeronautic engines (Herbert Chase)	147	Illumination
S A E semi-annual meeting	1	Nomography in engine design (F L Martineau)	224	Factory lighting
Corrosion of metal parts prevented	366	Oil engines, explosion (Herbert Haas)	302	Flood lighting devices needed
		Sabathé engines (Herbert Haas)	300	382
		Standard engine testing forms	378	Headlamp glare problem
		Tractor, oil burning (H T Sward)	209	332, 364
<b>Costs</b>		ERICSON, F G, ON TRANSATLANTIC FLIGHT	319	Illustrations
System for motor trucks	311	Exhibitions at the Dayton meeting	15	3, 7, 11, 31
Tractor operation in Illinois	270, 272	Express, rural motor (S W Penn)	383	Map of membership
Cultivators	199			120
				Members
				7, 11
				Industry, The
				Pres Kettering on tremendous future possibilities of
				5
				Inst of Automobile Engineers war time activities
				255
				Insurance rating schedule in factory lighting
				336
				Iron and Steel Div S A E reports
				103, 331
				Inventive problems, pressing
				382
				ISENBERG, H O C, ON PRODUCTION PROBLEMS OF HISPANO-SUIZA ENGINES
				371
				Izod testing machine
				348
				K
				Kent, William
				340
				Kerosene
				Kerosene and gasoline, half and half, high temperature, low load
				4
				Principal fuel for tractor engines
				209
				Tractors operated on
				6
				KETTERING, PRES C F, ON TRACTOR ENGINEERING POSSIBILITIES
				5
				ON FUTURE OF AIRPLANE BUSINESS
				358
				KEYS, WALTER C, ON FACTORY INSPECTION
				266
				KINDER, LT E H, ON TANKS IN MODERN WARFARE
				212
				L
				Labor
				Dept of, cooperating with farmers (A P Yerkes)
				197
				Man power of the future (Harry Tipper)
				164
				Work of U S Dept of Labor
				318
				Lamps and Illumination
				Headlamp tests in N Y State
				182
				LAY, DONALD MCL, ON THE HISPANO-SUIZA AIRCRAFT ENGINE
				367
				Legal matters, N Y State highway law revised
				332, 364
				Lighting Div. S A E reports
				183, 331
				Lubrication
				Acidity in ball bearing grease
				388
				Diesel engine methods
				304
				Force feed advisable for tractor engines
				210
				Hispano-Suiza engine
				370
				Oil film under pressure (G B Upton)
				278
				M
				Magnetos
				Dixie type in Hispano-Suiza aircraft engines
				369
				Ignition (H R Van Deventer)
				255
				G
				Gages
				333, 337, 338
				Gas bags, flexible, for motor cars
				204
				Gasoline
				Gasoline and kerosene, half and half, high temperature
				4
				Red Cross saves, how
				223
				Glare in motor vehicle headlamps
				332, 364
				Glue and cement investigated
				90
				GODRON, W G G, ON ELEMENTS OF DIESEL ENGINE DESIGN
				174
				Gun manufacturing, developments in (W H W Skerrett)
				153
				E
				Engines
				Aeronautic engines, modern (Herbert Chase)
				205
				Airplane engines
				376
				Airplane, future forms
				360
				Airplane performance determined by the engine (G B Upton)
				275
				Chase, Herbert, on modern aeronautic engines
				4
				Compound type on Diesel cycle
				4
				Compression ratio and pressures
				229
				Cross Atlantic airplane engines
				320
				Engine Division reports
				102, 287, 330, 389
				D
				Data Sheet Div S A E
				Magnetos
				286
				Report
				98
				Size of sheets
				98, 287, 330
				Davidson, Lt P J
				340
				DEEDS, COL E A, ON THE AIRPLANE INDUSTRY
				8, 10
				Diesel engine (Herbert Haas)
				299
				Diesel engine design (W G G Godron)
				174
				Diffin, F G, on Germany's offensive air power
				8, 12
				Dinners
				Orville Wright dinner, Dayton
				8
				Salina (Kan) dinner speeches
				152, 197
				Sir Henry Fowler dinner in N Y City
				183
				Victory dinner
				346
				DURAND, W F, ON OUTSTANDING AERONAUTIC PROBLEMS
				213, 280
				E
				Educational Matters
				Salina demonstration
				197
				Tractor schools (J H Everson)
				201
				EHRLMAN, E H, ON THE SCREW THREAD SITUATION IN GT BRITAIN AND AMERICA
				4, 122
				Electrical apparatus in airplanes
				362
				Electrical Equipment Div S A E reports
				100, 287, 330
				Engine Div S A E reports
				102, 287, 330
				Engineering, standards in the industry
				330
				Engineers, status of (A A Remington)
				381
				F
				Factory inspection (W C Keys)
				266
				Factory lighting
				336
				Farm implements and machines
				Cultivators
				199
				Tractors
				5, 31, 109, 197, 203, 209, 239, 269, 331
				Farm tractors (Kettering)
				5
				FAUROT, F L, ON AIRPLANES OF TODAY
				4, 32
				FENN, S W, ON RURAL MOTOR EXPRESS
				383
				Financial Report, at convention
				1
				Fire Underwriters councils, National Board of
				240
				Formulas, graphical representation of
				274
				Fuels
				Airplane engine fuels
				360
				Control of petroleum industry
				317
				Diesel engine fuel valves
				177
				Fuel and Lubrication Division
				183
				Fuel oil waste
				308
				Fuels for aerial navigation
				215
				Govt control of petroleum industry (M L Requa)
				317
				Gasoline system of Hispano-Suiza engine
				370
				Hvid engine, range of
				171
				Kerosene as fuel
				386
				Kerosene for tractor engines
				209
				Liquid fuel for engines
				299
				Oil, losses of, in storage
				235
				Production of crude petroleum
				377
				Petroleum refining
				69
				Unusual oil fuels
				172
				Use of low grade oils for tractor engines
				209
				Funk, T B, second vice-president
				242
				G
				Gages
				333, 337, 338
				Gas bags, flexible, for motor cars
				204
				Gasoline
				Gasoline and kerosene, half and half, high temperature
				4
				Red Cross saves, how
				223
				Glare in motor vehicle headlamps
				332, 364
				Glue and cement investigated
				90
				GODRON, W G G, ON ELEMENTS OF DIESEL ENGINE DESIGN
				174
				Gun manufacturing, developments in (W H W Skerrett)
				153
				H
				HAAS, HERBERT, ON THE DIESEL ENGINE
				299
				Hale, W A
				184
				Hanks, M W
				238
				Headlamp glare
				332
				Headlamp tests in N Y State
				182
				Hvid engine, possibilities of (E B Blakely)
				166
				I
				Illumination
				Factory lighting
				336
				Flood lighting devices needed
				382
				Headlamp glare problem
				332, 364
				Illustrations
				3, 7, 11, 31
				Map of membership
				120
				Members
				7, 11
				Industry, The
				Pres Kettering on tremendous future possibilities of
				5
				Inst of Automobile Engineers war time activities
				255
				Insurance rating schedule in factory lighting
				336
				Iron and Steel Div S A E reports
				103, 331
				Inventive problems, pressing
				382
				ISENBERG, H O C, ON PRODUCTION PROBLEMS OF HISPANO-SUIZA ENGINES
				371
				Izod testing machine
				348
				K
				Kent, William
				340
				Kerosene
				Kerosene and gasoline, half and half, high temperature, low load
				4
				Principal fuel for tractor engines
				209
				Tractors operated on
				6
				KETTERING, PRES C F, ON TRACTOR ENGINEERING POSSIBILITIES
				5
				ON FUTURE OF AIRPLANE BUSINESS
				358
				KEYS, WALTER C, ON FACTORY INSPECTION
				266
				KINDER, LT E H, ON TANKS IN MODERN WARFARE
				212
				L
				Labor
				Dept of, cooperating with farmers (A P Yerkes)
				197
				Man power of the future (Harry Tipper)
				164
				Work of U S Dept of Labor
				318
				Lamps and Illumination
				Headlamp tests in N Y State
				182
				LAY, DONALD MCL, ON THE HISPANO-SUIZA AIRCRAFT ENGINE
				367
				Legal matters, N Y State highway law revised
				332, 364
				Lighting Div. S A E reports
				183, 331
				Lubrication
				Acidity in ball bearing grease
				388
				Diesel engine methods
				304
				Force feed advisable for tractor engines
				210
				Hispano-Suiza engine
				370
				Oil film under pressure (G B Upton)
				278
				M
				Magnetos
				Dixie type in Hispano-Suiza aircraft engines
				369
				Ignition (H R Van Deventer)
				255



## INDEX TO VOLUME III

409

Standard dimensions for	286	Plimpton, R E	335	Washington Section	341, 373
MANLY, CHARLES M, ON INTERNATIONAL AIRCRAFT STANDARDS	89	Propeller calculations, conventional (F W Caldwell)	132	Winter meeting	297, 345
ON THE WAR SITUATION	8, 13			Springs Div S A E reports	331, 389
Man power of the future (Harry Tipper)	164	<b>Publications</b>		<b>Standardization</b>	
Marine Div S A E reports	331	Journal, the	1, 2, 195	Administrative committees	193
MARTINEAU, F L, NOMOGRAPHY IN ENGINE DESIGN	224	S A E convention daily journal	1	Aeronautic Div S A E report	92, 106, 183
		S A E Handbook	2, 98	Amer British Gage Bureau	338
		Pumps, Diesel engine	177	Are standards an asset	286
<b>Membership</b>				British Eng Standards Commission on ball bearings	95
Cablegram from overseas	2			British work, Inst of Automobile Engineers	256
New roster issued	211			Current work September	238
S A E Membership Committee, convention report		1. Radiators, automobile antifreeze solutions for	285	October	287
		Rates, established automobile, unsound	240	November	330
<b>Metals</b>				December	389
Aluminum castings	371	<b>Ratings</b>		Data Sheet Div S A E report	98, 286, 287, 330, 340
Corrosion prevention of aircraft metal parts.	366	Belt power	239	Electrical Equipment Div S A E report	100, 287, 330
Steel for Hispano-Suiza engine parts	371	Belt speed	240	Engine Div S A E report	102, 287, 330
Metropolitan section outing	242	Drawbar	239	Engine testing forms	378
Miscellaneous Div S A E	183, 331	Pulley width	240	Iron and Steel Div S A E report	103, 331
		REMINGTON, PRES A A, ON POST-WAR CONDITIONS	381	Screw thread commission appointed	241
<b>Motor Vehicles</b>		REQUA, M L, ON GOVT CONTROL OF PETROLEUM INDUSTRY	317	Springs Div S A E reports	331, 389
Gas bags, flexible, for	204			Standard screws and bolts	333, 337
Headlamp glare problem	332	<b>Roads and Highways</b>		Standard ratings for tractors	239
Motor trucks as an aid to business profits (S V Norton)	309	Relation of, to truck haulage	383, 385, 387	Stationary and Farm Engine Div S A E report	331
Specifications for light U S Army trucks	178	Vast highway construction proposed	388	Tire and Rim Div S A E report	103, 331
Tanks in modern warfare (E H Kinder)	212	ROBERTS, E W, ON DIESEL ENGINES	4	Tractor Div S A E report	108, 183, 239, 288, 331
U S Motor Transport Corps	374	Rural motor express (S W Fenn)	383	Truck Standards Div S A E report	332
Motorcycle Div S A E	183			Stationary and Farm Engine Div S A E report	331
Munitions, British Ministry of, N Y Laboratory	125				
		<b>S</b>		<b>Steel</b>	
<b>N</b>		Sabathé engines (Herbert Haas)	300	International aircraft standards	89
Nomenclature Div S A E report	330	Salina (Kan) dinner speeches	197	Loops for single-strand steel cable	92
Non-Ferrous Div S A E	183	Screw threads and bolts	122, 126, 333, 337	Tubing for structural purposes	89
NORTON, S V, ON THE MOTOR TRUCK AS AN AID TO BUSINESS	309	Screw thread situation in Gt Britain and America (E H Ehrman)	122	STOUT, W B, ON PRESENT DAY PROBLEMS IN AERONAUTICS	4, 22
Notched bars, experiments on (H T Philpot)	347	Section activities	196, 242, 291, 341, 390	STRATFORD, C W, ON PETROLEUM REFINING	4, 69, 84
		Conference at Dayton	121	STRATTON, S W, ON THE AVIATION PROGRAM	8, 13
		Local organizations	119	SWARD, H T, ON OIL BURNING TRACTOR ENGINES	209
		SKERRETT, LT W H W, ON DEVELOPMENT IN GUN MANUFACTURE	153		
<b>O</b>				<b>T</b>	
<b>Oils, Coal and Other Fuels</b>		<b>Societies</b>		<b>Tests</b>	
Airplane engine fuels	360	Aircraft Inspection Dept investigates glue and cement	90	British Natl Physical Laboratory inspection gages	130
Control of petroleum industry	317	A S M E on the screw thread situation	122	Headlamp tests in N Y State	182, 364
Fuel and Lubrication Div S A E	183	Amer Soc for Testing Materials	89	Hvid engine cylinder tests	168
Fuel oil waste	308	Assn Licensed Automobile Mfrs	333	Magneto testing	261
Fuels for aerial navigation	215	British Air Council	88	Mufflers for airplane engines	144
Gasoline system of Hispano-Suiza engine	370	British Eng Standards Assn	89, 338	Notched bars	347
Govt control of petroleum industry (M L Requa)	317	Inst of Automobile Engineers (English)	255, 381	Standard engine testing forms	378
Greases	77, 80	War Committee of Technical Societies	382	Tire and tube tests combined	107
Hvid engine, range of	171			Torque tests	169
Kerosene as fuel	386	<b>S A E</b>		Tunnels, wind	401
Kerosene for tractor engines	209	An appreciation (Howard Coffin)	10	TIPPER, HARRY, ON MAN POWER OF THE FUTURE	164
Losses of, in storage	235	Automotives carry through	346	Tire and Rim Div S A E reports	103, 331
Liquid fuel for engines	299	Constitutional amendments as adopted	289	Tires, pneumatic, on trucks	384
Lubricating oils (C W Stratford)	73, 81	Council meetings	111, 183, 193	Tire repairing and vulcanizing (H H Tufford)	404
Production of crude petroleum	377	Dinner to Sir Henry Fowler	183	Tractor Div S A E reports	108, 183, 239, 288, 331
Petroleum refining	69	Engine testing forms	378		
Unusual oil fuels	172	Headquarters service of the society	193	<b>Tractors</b>	
Use of low grade for tractor engines	209	Journal, the	1, 2, 195	Engines, oil burning (H T Sward)	209
Waste fuel oil	308	Local organizations	119	Experience in Illinois (Yerkes and Church)	269
Ordinance exhibition at Dayton	15	Nominees for officers	279	Farm tractors at Dayton	31
		Section activities	119, 121, 196, 242, 291, 341, 390	Farmers' viewpoint (C M Eason)	203
<b>P</b>		Semi-annual meeting	1	Kettering, C F, on engineering possibilities of	5
Petroleum production	377	Specifications, tractor complete	109	Salina demonstration of	197
Petroleum refining (C W Stratford)	69	Standard screw pitches	126	Standard ratings for	239
PHILPOT, CAPT H T, ON SOME EXPERIMENTS ON NOTCHED BARS	347	Transactions	195		
		Victory dinner	346		
		Washington office of	196, 298, 346		

*Traffic and Transportation*

Transport committees at work in every state 291  
Transmission Div S A E reports 332

*Trucks*

Appeal of motor truck 387  
Crops moved by motor trucks in Idaho 383  
Exhibition in Dayton 15  
Good roads a necessity under truck traffic 316  
Motor trucks as an aid to business (S V Norton) 309  
Short haul costs 385  
Specifications for light U S Army trucks 178  
Trailers, use of 312  
Truck Standards Div S A E reports 332  
U S Motor Transport Corps 374  
Work of S A E members on army trucks (Lt Col Edward Orton) 375  
Tunnels, Wind 401  
Turnbuckles, Standards committee report 92

## U

Underwriters' laboratories form automobile and other councils 240  
U S Army  
Ambulance bodies and trailers ordered 19  
Specifications for motor transport service for light truck 178  
U S Dept of Agric  
Tractor experience in Illinois 269  
U S Dept of Labor, work of 318  
U S Motor Transport Corps 374  
U S Navy  
Airplane Dept specifications 325  
Airplane development 373, 376  
UPTON, G B, ON AIRPLANE PERFORMANCE DETERMINED BY ENGINE PERFORMANCE 275

## V

VAN DEVENTER, H R, ON CONSTRUCTION OF IGNITION MAGNETOS 257

VINCENT, LT-COL J G, ON DAYTON AVIATION ACTIVITIES 8, 12

## W

War, the  
Tanks in modern warfare (E. H. Kinder) 212  
Washington office, S A E 346  
Washington Section organization meeting 373, 390  
YERKES, ARNOLD P, ON TRACTOR EXPERIENCE IN ILLINOIS 269

## Z

Zone system as a basis for delivery, the 312, 315



